BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM 17.36.103, 17.36.106, 17.36.112, 17.36.116, 17.36.310, 17.36.314, 17.36.326, 17.36.330, 17.36.331, 17.36.333, 17.36.334, 17.36.335, 17.36.345, 17.36.802, and 17.36.804 pertaining to adoption of a new version of Department Circular DEQ-8	))))))))))	NOTICE OF AMENDMENT (SUBDIVISIONS)

TO: All Concerned Persons

1. On September 22, 2017, the Department of Environmental Quality published MAR Notice No. 17-392, pertaining to the public hearing on the proposed amendment of the above-stated rules at page 1580 of the 2017 Montana Administrative Register, Issue No. 18.

2. On March 16, 2018, the Department of Environmental Quality published an amended notice for MAR Notice No.17-392 amending the proposed amendments to ARM 17.26.310 and 17.36.345 at page 522, 2018 Montana Administrative Register, Issue No. 5.

3. The department has amended ARM 17.36.106, 17.36.112, 17.36.116, 17.36.314, 17.36.326, 17.36.330, 17.6.334, 17.36.335, 17.36.345, and 17.36.804 exactly as proposed.

4. The department has not amended ARM 17.36.103, 17.36.331, 17.36.333, and 17.36.802.

5. The department has amended 17.36.310 as proposed but with the following changes from the original proposal, stricken matter interlined, new matter underlined:

17.36.310 STORM DRAINAGE (1) remains as proposed.

(2) Storm drainage plans must be prepared by a professional engineer and must comply with the requirements in ARM 17.36.314 if the subdivision application proposes either of the following:

(a) remains as proposed.

(b) ~~a commercial lot or~~ a lot proposed for use other than a single living unit~~,~~ with greater than 25~~%~~ percent impervious area.

(3) and (4) remain as proposed.

(5) The reviewing authority may ~~waive~~ exempt the requirements of (1), (2), and (3) for subdivisions located entirely within a first-class or second-class municipality, as described in 7-1-4111, MCA, or within a Municipal Separate Storm Sewer System (MS4) general permit area, as defined in ARM 17.30.1102, if:

(a) remains as proposed.

(b) the municipal or MS4 entity either accepts the stormwater into a municipal storm water system or requires the applicant to comply with municipal or MS4 storm water drainage design standards. ~~The design standards applicable to the applicant may not be less stringent than the requirements of Circular DEQ-8.~~

(6) through (9) remain as proposed.

6. The following comments were received and appear with the department's responses:

ARM 17.36.103

COMMENT NO. 1: One commenter stated that the rule should be revised to be clear that new surface water sources cannot be approved. Another commenter also supported the amendment but recommended making the same amendments to ARM 17.36.332(9) for consistency.

RESPONSE: The department agrees that the rule could be more clear and that the proposed rule would conflict with ARM 17.36.332(9), which was not included in this rulemaking. To ensure that the proposed rule does not conflict with other existing rules that are not a part of this rulemaking, the department will not adopt the proposed rule at this time.

ARM 17.36.106

COMMENT NO. 2: One commenter expressed support of the amendment.

RESPONSE: The department appreciates the comment.

ARM 17.36.112

COMMENT NO. 3: Two commenters supported the amendment.

RESPONSE: The department appreciates the comments.

ARM 17.36.116

COMMENT NO. 4: One commenter stated that the amendment was a good idea.

RESPONSE: The department appreciates the comment.

ARM 17.36.310

COMMENT NO. 5: One commenter asked whether certificates of subdivision approval for plans not designed by professional engineers will be required to specify commercial storm water facilities (e.g., size of buildings, amount of paved area, etc.).

RESPONSE: As a matter of practice for plans not designed by professional engineers, the certificate of subdivision approval must list the approved facilities but not the assumptions made in the approval of facilities because the level of complexity is generally lower.

COMMENT NO. 6: One commenter suggested a revision to the requirement that a professional engineer must design storm water plans for a lot proposed for use other than a single living unit with more than 25 percent impervious area. The commenter stated that there is often not a significant difference between a big house and a small duplex and, therefore, a professional engineer should not be required to design storm water plans for two living units with greater than 25 percent impervious area.

RESPONSE: The department disagrees. The requirement for a professional engineer reflects the reality that, even though a duplex is two living units in one building, storm water design plans for duplexes must address the increased complexity caused by increased parking spaces and the number of people impacted. The rule remains unchanged.

COMMENT NO. 7: One commenter suggested that proposed subsection (2)(b) be modified to clarify whether all commercial lots have to have an engineer-designed storm water plan or just commercial lots with more than 25 percent impervious area.

RESPONSE: The department agrees that the rule could be more clear. The proposed amendment has been modified to clarify that the requirement that a professional engineer submit storm drainage plans applies when there are six or more lots and when there is a lot proposed for use other than a single living unit with greater than 25 percent impervious area.

COMMENT NO. 8: One commenter noted that it would be helpful to have specific criteria outlined in the rules as to when a homeowner's association or similar entity will be required so that applicants can plan accordingly.

RESPONSE: The suggested changes are beyond the scope of this notice, but this comment may be addressed in a future rulemaking.

COMMENT NO. 9: One commenter stated that the requirement that easements be obtained to allow adequate operation and maintenance should be revised to clarify what qualified as "adequate operation and maintenance."

RESPONSE: The suggested changes are beyond the scope of this notice but may be considered in a future rulemaking.

COMMENT NO. 10: One commenter suggested that two property owners should be able to establish easements on a plat or certificate of survey. The commenter also suggested that other easement documents be allowed when both lots are owned by one person to account for applications in which plats or certificates of survey are not filed.

RESPONSE: The department has left the rule unchanged. The requirements in this rule mirror the existing easement rules for sewage systems in ARM 17.36.326 and for water systems in ARM 17.36.334, neither of which is part of this rulemaking. Modifying this rule would lead to confusion and inconsistency among the easement requirements for the three systems. The department may consider changes to all three rules in a future rulemaking.

COMMENT NO. 11: With regard to the proposed exemption from storm water review for qualifying subdivisions in municipalities or MS4 areas, one commenter noted that the rule was missing a requirement that the municipality either review or accept and manage the additional storm water.

RESPONSE: The department agrees and has amended ARM 17.36.310 to address this issue.

COMMENT NO. 12: One commenter asked how the department would determine whether the design standards applicable to the applicant were as stringent as the requirements of DEQ-8.

RESPONSE: The department has amended ARM 17.36.310 to remove the requirement that MS4 systems meet DEQ-8 requirements. The department believes meeting the MS4 requirements provides an acceptable level of protection and that compliance with DEQ-8 is not necessary for these systems.

COMMENT NO. 13: One commenter asked if a waiver fee would be required for the review of letter from the municipal or MS4 entity.

RESPONSE: The department does not intend to charge a waiver fee for this review. The rule has been modified to clarify that qualifying subdivisions will be exempt from review, instead of being eligible for a waiver.

COMMENT NO. 14: One commenter asked how the department would determine if the municipality of MS4 entity meets the minimum design standards of proposed circular DEQ-8 if the municipality has adopted a design standard that varied widely from those in DEQ-8. The commenter suggested a standard based on environmental site designs rather than adherence to DEQ-8.

RESPONSE: See the department's response to Comment No. 12.

ARM 17.36.314

COMMENT NO. 15: One commenter asked how the proposed amendment would align with ARM Title 17, chapter 38, and stated that it is important to make sure that different department programs are consistent.

RESPONSE: Standing alone, the procedure for reapproving expired approvals in the proposed amendment of ARM 17.36.314, which applies to storm water drainage plans, multi-user sewage systems, and multi-user water supply systems, does not conflict with the procedures in ARM Title 17, chapter 38, which apply only to public water and public sewage systems. However, the proposed amendment to ARM 17.36.331 created a potential conflict by tying both regulations together. Because the department is not adopting the proposed changes to ARM 17.36.331, as discussed in the responses to Comments 21 and 22, the two sets of regulations will not contradict.

COMMENT NO. 16: Two commenters expressed their support of the amendment.

RESPONSE: The department appreciates the comments.

ARM 17.36.326

COMMENT NO. 17: One commenter expressed their support of the amendment.

RESPONSE: The department appreciates the comment.

COMMENT NO. 18: One commenter asked whether a shared users agreement should be attached as an exhibit to the certificate of subdivision approval, because purchasers often do not get this information when a sale occurs.

RESPONSE: The department does not believe it is necessary to require rule user agreements to be attached as exhibits to the certificate of subdivision approval. Under 76-4-113, MCA, a seller must give a copy of the certificate of subdivision approval to a purchaser. Shared user agreements are referenced in the certificate of subdivision approval, providing the purchaser with notice that the subdivision approval included a user agreement. In any event, user agreements are typically attached to the certificates of subdivision approval as a matter of practice. The rule remains the same.

COMMENT NO. 19: One commenter noted that the proposed amendment should clarify what it means for a user agreement to "be in a form acceptable to the department."

RESPONSE: The language highlighted by the commenter is existing language that the department has not proposed to change. This suggested change is beyond the scope of this notice but may be addressed in a future rulemaking.

ARM 17.36.330

COMMENT NO. 20: One commenter stated their support for the amendment.

RESPONSE: The department appreciates the comment.

ARM 17.36.331

COMMENT NO. 21: One commenter asked for guidance regarding the proposed requirement that adequate treatment be provided through filtration and disinfection.

RESPONSE: The department agrees that the rule should clarify minimum treatment levels necessary to demonstrate adequate treatment. The department will not adopt this rule at this time.

COMMENT NO. 22: Two commenters opposed the proposed requirement that all public water supply systems be designed by a professional engineer. One contended that the subdivision rules should not require designs by professional engineers that would not otherwise be required under the public water supply rules. The commenter further contended that the new rule would make subdivision review more complicated and expensive than it needs to be. Another commenter questioned the necessity of the requirement and noted that requirements for

additional professionals added to housing costs and increased the burdens of compliance, particularly for small businesses and the communities they serve.

RESPONSE: The department agrees that the public water supply rules do not require all public water supply systems to be designed by a professional engineer. In an effort to coordinate the rules under the Montana public water supply laws and the Sanitation in Subdivisions Act, the department will not at this time adopt the rule requiring all public water systems subject to subdivision review to be designed by a professional engineer. However, the Sanitation in Subdivisions Act specifically requires the reviewing authority to require certification from a registered professional engineer that a public water supply system or a public sewage disposal system has been constructed according to approved specifications. The department will continue to enforce this statutory requirement.

ARM 17.36.333

COMMENT NO. 23: One commenter noted that the changes to the proposed rule conflicted with the requirements for existing systems in ARM 17.36.335.

RESPONSE: The department acknowledges that the proposed amendment might be confusing in light of the existing requirements of ARM 17.36.335, which are not a part of this rulemaking. To prevent potential confusion, the department will not amend this rule at this time but may consider doing so in a future rulemaking.

COMMENT NO. 24: One commenter supported the proposed amendment because it requires existing individual and shared wells to meet only the construction standards in place at the time they were drilled.

RESPONSE: Please see the department's response to Comment No. 23.

ARM 17.36.334

COMMENT NO. 25: One commenter asked whether a shared users agreement should be attached as an exhibit to the certificate of subdivision approval because purchasers often do not get a lot of information when a sale occurs.

RESPONSE: Please see the department's response to Comment No. 18.

COMMENT NO. 26: Two commenters expressed their support for the amendment.

RESPONSE: The department appreciates the comments.

ARM 17.36.335

COMMENT NO. 27: One commenter expressed their support for the amendment.

RESPONSE: The department appreciates the comment.

ARM 17.36.345

COMMENT NO. 28: One commenter urged the department, in order to avoid

confusion over other regulations that impact storm water, to compare the proposed rule amendments to the rules relating to municipal separate storm water systems (MS4) for consistency.

RESPONSE: The department is not aware of inconsistencies between the two sets of rules. Please also see the department's responses to Comments No. 11 through 14.

COMMENT NO. 29: One commenter urged the department to review the rules related to storm water pollution prevention plans as part of an overall examination of storm water regulatory practice.

RESPONSE: This comment is outside the scope of the notice but may be considered at future time.

COMMENT NO. 30: One commenter asked why a report was necessary for simplified plans under Section 2.2 rather than accept a simple checklist.

RESPONSE: A simple checklist would not adequately provide the information necessary to evaluate a storm water plan. However, the requirements for a report in Section 2.2 do not specify a format, which gives applicants the flexibility to address the necessary information in a way that is appropriate for the project.

COMMENT NO. 31: One commenter disagreed with the 3 percent maximum slope under Section 3.2.A for simplified plans and suggested changing the criteria to 5 percent, or compromising at 4 percent.

RESPONSE: The department disagrees. The maximum slope requirement for a simplified plan is established because these plans do not require an analysis of facilities to address erosion, unlike standard plans. According to the Federal Highway Administration, Hydraulic Engineering Circular No. 15, Third Edition, Design of Roadside Channels with Flexible Linings, there can be erosional issues at slopes greater than 2 percent. Additionally, *Open Channel Hydraulics* by Richard H. French states that maximum erosive velocities for graded loam or graded silt is developed on slopes of 3 percent. Thus, areas less than 3 percent should have minimal erosional concerns, and increasing the slope might result in erosive velocities in many of the soil types found in Montana. The circular remains unchanged.

COMMENT NO. 32: One commenter asked why the circular did not allow the use of the latest published storm drain spreadsheets from Montana Department of Transportation (MDT) or other acceptable sources.

RESPONSE: The circular does not prohibit the use of spreadsheets from MDT or other acceptable sources. Sections 3.2 and 3.3 state that the spreadsheets provided to calculate flow rates and volumes are examples only. Sections 3.6 and 3.7 state that applicants may use other sources that are approved by the reviewing authority.

COMMENT NO. 33: One commenter asked the department to provide Intensity, Duration, Frequency (IDF) curves for all the major areas of Montana for

uniformity in the data used in applications for the same geographical area. The commenter also stated that IDF curves for major areas in Montana needed to be provided because the circular requires designs with peak flow at time of concentration.

RESPONSE: The department will publish a spreadsheet on the subdivision webpage that provides IDF curves for all the major areas in Montana.

COMMENT NO. 34: In response to the requirement in Section 4.3 that designs for storm sewers include a hydraulic grade line, one commenter stated that hydraulic grade lines should not be required for every storm drain line. The commenter suggested that hydraulic grade lines be required only for complex storm sewer designs.

RESPONSE: The department disagrees. Due to the hydraulic complexity of storm sewer systems, hydraulic grade lines are necessary to show hydraulic functioning of the system. Hydraulic grade lines are necessary to ensure that the storm sewer will be able to convey the designed runoff. The circular remains the same.

COMMENT NO. 35: In response to Section 4.3, one commenter asked what a closed loop is and why it cannot be used in a storm sewer design.

RESPONSE: The department agrees that there should be a definition of "closed loop" in Section 4.3. Closed loops cannot be used because all storm water must be able to reach an outlet to ensure the functionality of the storm sewer network. The following change has been made to Section 4.3:

D. No closed loops. For purposes of this circular, a closed loop is a network of pipes in which there is an inlet but no outlet for storm water.

COMMENT NO. 36: One commenter stated that the requirements in Section 4.4(B) were too complex for simple storm drain designs.

RESPONSE: The department disagrees. The requirements in this section, including requirements for culvert elevation, roadway elevation, and runoff elevations, are important to ensure that the culvert diameter specified in the design can be constructed and will function correctly. The circular remains the same.

COMMENT NO. 37: One commenter asked what runoff elevation meant in Section 4.4(B).

RESPONSE: Runoff elevation is the water level, synonymous with headwater or tailwater elevation. The circular has been changed in response to this comment to read:

B. Culvert inverts, roadway elevations, and runoff water elevations for both the 10-year and 100-year storm events.

COMMENT NO. 38: One commenter stated that the provision in Section 5.2 requiring side slopes on retention facilities to be no steeper than 3 to 1 be revised to allow for steeper slopes as long as there is a fence or other barrier to keep the public

out.

RESPONSE: The requirement for slopes to be no steeper than 3 to 1 addresses not only public safety but also slope stability and ease of maintenance of the facility. To facilitate flexibility in design, all requirements in the circular are eligible for a deviation. If an applicant would like to use a steeper slope, the applicant would need to show how the deviation criteria are met. The circular remains the same.

COMMENT NO. 39: One commenter stated that the infiltration rates in Appendix C are too slow. Revising Appendix C to use reasonable values would avoid unnecessary expensive infiltration testing.

RESPONSE: The department disagrees. While the infiltration rates in Appendix C are conservative, one of the factors limiting the life expectancy of an infiltration facility is pore clogging from sediment. To ensure that a system will continue to accept runoff, even with sediment-loaded stormwater, the system must be sized with a factor of safety. With appropriate pre-treatment, the infiltration rates specified in Appendix C may be modified, as stated in Section C.1. The circular remains the same.

COMMENT NO. 40: One commenter requested clarification of where a filter fabric liner should be placed in an infiltration facility in Section 6.2(C).

RESPONSE: The fabric filter or other material must be used to prevent clogging. The placement of the liner will be project dependent. The circular remains the same.

COMMENT NO. 41: One commenter asked whether the pre-treatment facilities described in Section 6.2(F) would be required for simple, single-family storm-water designs and commented that such a requirement would be overkill.

RESPONSE: Single-family storm water designs can be simple or complex. To allow flexibility in design, pre-treatment facilities are required only when sediment, trash, debris, or organic materials are likely to impact the operation or maintenance of the infiltration facility, as stated in Section 6.2(F). The circular remains the same.

COMMENT NO. 42: One commenter noted that Appendix B provided the soil conservation service (SCS) method for computing time of concentration and commented that the circular should be revised to allow other acceptable methods.

RESPONSE: The SCS is one of several methods described in Appendix B. Section 3.7 states that other methods are allowed if approved by the reviewing authority. The circular remains the same.

COMMENT NO. 43: One commenter stated that the infiltration rates reflected in the infiltration table in Appendix C are too slow. At a minimum, a footnote should be added stating that the infiltration rates can be increased significantly if pre-treatment is provided.

RESPONSE: Please see the department's response to Comment No. 38.

COMMENT NO. 44: One commenter stated that the circular orifice discharge coefficient in the example equation in Appendix D should be 0.62 instead of 0.6.

RESPONSE: The orifice discharge coefficient is a function of the orifice diameter and whether the flow is free or submerged. The values range from 0.57 to 0.64, with 0.62 used for either sharp crested orifices or those with a diameter of 0.025 or 0.05 meters with free flow. Since the equation was provided as a guide, not as a requirement, the circular remains the same.

COMMENT NO. 45: One commenter asked how the Standard Storm Drainage Plan spreadsheet in Appendix F will calculate time of concentration without an IDF curve.

RESPONSE: Appendix F provides an example of a spreadsheet for a simple plan, not a standard plan. As described in Appendix B.1.1, the spreadsheets for both the simple plan and the standard plan use the rational or modified rational method, where the time of concentration is equal to one hour and is not based on an IDF curve. The circular remains the same.

COMMENT NO. 46: One commenter stated that the circular should not be adopted until the department has provided training that goes through in detail each of the examples in Appendices H through M.

RESPONSE: The department provided training on storm drainage in Billings, Helena, and Missoula in June to August 2016. The department may consider additional trainings in the future as a result of this comment.

COMMENT NO. 47: In response to the example in Appendix L, one commenter stated the department should provide IDF curve spreadsheets and IDF curves for all major areas in Montana, so that applicants are not penalized for not having the latest rainfall data.

RESPONSE: The department has provided Appendix A for rainfall data, but, in accordance with Section 3.6, other sources may be used with the approval of the reviewing authority. In addition, see the department's response to Comment No. 32.

COMMENT NO. 48: One commenter stated that the proposed changes to DEQ-8 would make it nearly unavoidable to employ an engineer for almost any storm water related matters in subdivision development.

RESPONSE: The department disagrees. Many designers already submit storm water plans, and the proposed amendments to DEQ-8 do not affect their ability to do so. Likewise, the proposed amendments allow fewer requirements for those applications that qualify for simplified plans, which will make such designs easier to submit for designers. Finally, the proposed amendments to DEQ-8 include a large number of spreadsheets and examples to assist users.

ARM 17.36.802

COMMENT NO. 49: Two commenters stated their support of the proposed fee changes that would allow the reviewing authority to charge a per-hour fee for certain subdivision applications that had been denied multiple times.

RESPONSE: The department appreciates the comments but has determined that the proposed changes were not adequately clear in how they would apply in relation to the rule as a whole, including those parts of the rule not part of this rulemaking. Because of that, the department is declining to make the proposed amendments at this time, but may consider the changes in a future rulemaking.

ARM 17.36.804

COMMENT NO. 50: Two commenters expressed their support for the per-lot reimbursement to local health departments. One stated that, although the reimbursement increase makes the system more equitable, more should be done in this area, which should be a point of discussion between local health departments and the department.

RESPONSE: The department will continue to discuss these issues with local health departments in the future.

Reviewed by:

DEPARTMENT OF ENVIRONMENTAL QUALITY

/s/ Edward Hayes
EDWARD HAYES
Rule Reviewer

BY: */s/ Tom Livers*
TOM LIVERS, Director

Certified to the Secretary of State, July 31, 2018.